Variant 1: Investigation of RNA analytes and use of RNA polymerase

Target = RNA, probes A in 3'-5' orientation,
 probes B in 5'-3' orientation;

analytical principle = primer extension

|                           | Amplification s   | 是创始全国 |
|---------------------------|---|-------|
|                           |   |       |
| Target                    | 5TXXXXABCX XX TGC ATT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  | RNA   |
| : probes A <sub>1,n</sub> | Solid Plase 3 T.G.C.A. 5 promoter 1 not extendable per se | DNA   |
|                           |   |       |
| !                         | 5:XXXXABCX XX ACGTRAL RNASE H activity                    | RNA   |
|                           | Salbenase SETEGASS promoter &                             | . DNA |
|                           | 5:XXXXABGX XX ACGT : attachment of a promoter             | RNA   |
|                           | Solidenase The 33-TGCA 55-2 promoter 51                   | DNA   |
|                           |   |       |
| Targets C <sub>1y</sub>   | 3/XXXX/abcXXXX/TGCA-5. < < ·amplicon                      | RNA   |
|                           | 5-XXXXABGX XX-ACGT 12-X2-X2-X3                            | RNA   |
|                           | Sold Phase 2 3 37 GGA 55 Promoter 5                       | DNA   |
|                           | ·   |       |

Target = RNA, probes A in 5'-3' orientation,
 probes B in 5'-3' orientation;

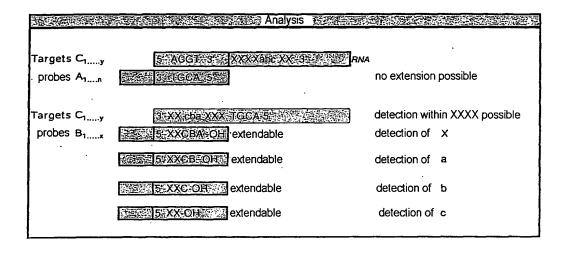
analytical principle = primer extension

|   | Analysis  |   |
|---|---|---|
| Targets C <sub>1y</sub> :probes A <sub>1n</sub> | 52 ACGT XX XXabc XXXX3<br>Solideplases 34 TiGCA: 532 promoter   | RNA no extension possible                     |
| Targets C <sub>1y</sub> probes B <sub>1x</sub>  | 3°XXXX abcXXXX TGCA 5' // Solid Phase 5' XXXX ABC 4' extendable | detection within XXXX possible detection of X |
|   | Solid Phases 55 XXCB OH Pextendable                             | detection of a                                |
|   | Sold Praise 5 XX C-OH extendable                                | detection of b                                |
|   | Solid Phase 5 XX OH extendable                                  | detection of c                                |
| <u> </u>  |   |   |

Target = RNA, probes A in 5'-3' orientation,
 probes B in 5'-3' orientation;

analytical principle = primer extension

|                                  | Amplification Services   | 题          |
|----------------------------------|--|------------|
| Target<br>probes A <sub>1n</sub> | Promoter 5 AGG 132 not extendable DNA  |            |
|                                  | promoter 35-ACGT 31 not extendable   |            |
|                                  | promoter 5 ACGI 31 not extendable  |            |
| Targets C <sub>1y</sub>          | 5-ACGT-5 XXXXabCXX 3 amplicon  3-ACGT-5 XXXXABCXX 5 promoter 2215-ACGT-32 not extendable | RNA<br>RNA |
|                                  | promoter SS SE ACGTSS not extendable   | DNA        |



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Target = RNA, probes A in 5'-3' orientation,
 probes B in 5'-3' orientation;

analytical principle = hybridization

|                                  | Amplification Higher Commence of the Commence  |                   |
|----------------------------------|--|-------------------|
| Target<br>probes A <sub>1n</sub> | 5-XXXXABCX XX TGCA XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  | RNA<br>DNA        |
|                                  | 5:XXXXABCX XX ACGT RNASE H activity Soid-Prince 3: 3:TGCA75: promoter 3:   | RNA<br>DNA        |
| ·                                | 5 XXXXABCX XX ACGI attachment of a promoter solution of a promoter s | RNA<br>DNA        |
| Targets C <sub>1y</sub>          | 32XXXX abc XXXX GC A-5; < <- amplicon  52XXXXABC X XX ACG I  | RNA<br>RNA<br>DNA |
| Incorporation                    | orl of signal emitters (e.g. bio-NTPs) during amplification for analysis.  |                   |

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